



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/957,014	09/20/2001	Richard Francis Russell	2001-0158.02	3768
21972	7590	11/24/2004	EXAMINER	
LEXMARK INTERNATIONAL, INC. INTELLECTUAL PROPERTY LAW DEPARTMENT 740 WEST NEW CIRCLE ROAD BLDG. 082-1 LEXINGTON, KY 40550-0999			PRIETO, BEATRIZ	
			ART UNIT	PAPER NUMBER
			2142	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/957,014

Applicant(s)

RUSSELL ET AL.

Examiner

Prieto Beatriz

Art Unit

2142

**– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 7/26/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. 09/957,014.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***DETAILED ACTION***

1. This communication is in response to Response filed on 7/26/04, no claims were amended. claims 1-25 remain pending and have been examined.
2. Regarding claims 1 and 11 are rejected under 35 U.S.C. §101, applicant argument indicating that because claim 1 recites a computer program as part of an statutory manufacture or machine subject matter, i.e. a computer, network and network adapter, claims 1 and 11 are directed to statutory subject matter (remarks p. 7-8), has been considered and found persuasive. Hereby, rejection is withdrawn.
3. Regarding claim 1 rejected under 35 U.S.C. §102(b) as being anticipated by Cheshire, applicant argued basically, that this reference teaches a computer assigning its own interface with an IP address, it does not teach a computer assigning over a network an IP address to a network device coupled to a device (remarks p. 11-12), has been considered and found persuasive. Hereby, rejection is withdrawn.

***Claim Rejections - 35 USC § 103***

3. Quotation of the appropriate paragraphs of 35 U.S.C. 103 that form the basis for the rejections under this section made in this Office action may be found in previous office action.
4. Claims 1, 9-10, 17 and 25 are rejected under 35 U.S.C. §103(a) as being obvious over Buse et. al. (US 6,810,420) referred to as Buse hereafter in view of Cheshire et. al. (Cheshire), 03/1999.

Regarding claim 1, Buse teaches a scheme for allocating over a network an IP address to a device (col 3/lines 5-8), including assigning an IP address to a device (Fig. 2), the scheme including

a computer (2 or 3) and a device communicatively coupled to network (1) (Figs. 1-2, col 1/lines 38-45, col 2/lines 28-36), thereby said network providing communicative interconnection between said computer and said device;

said computer assigning said Internet Protocol IP address to said device over the network (col 3/lines 5-8, 16-19, col 2/lines 46-49, 50-54), including generating an IP address (step 36 of Fig. 3) (col 4/lines 1-3);

determining that the IP address is in use (steps 37-38 of Fig. 3) (col 3/lines 38-40);

using an address resolution protocol to determine if the IP is in use (col 3/lines 40-41);

wherein if said IP address is not in use, then assigning said IP address to said device via the network (step 34 of Fig. 3) (col 4/lines 38-40) and configuring the device with said IP address (col 3/lines 26-28); although Buse suggest using an address resolution protocol, it does not explicitly the use of a probe, nor where assigning an IP address to a device is performed by assigning the IP address to the network adapter of the device which connects the device to the network.

Cheshire discloses the configuration a new devices connected to a network by configuring the IP addressing and other stack parameters, thereof, including configuring the device's interface with and IP address (pages 2-3); disclosing incorporating a randomly generated internet protocol address in an address resolution protocol (ARP) probe (page 3); sending said ARP probe (i.e. broadcast query) on said network for verify whether a response (by a communicatively coupled recipient) to said ARP probe indicates that said internet protocol address is in use or not (page 3); and if said internet protocol address is not in use, then assigning said internet protocol address to said network interface via said (LAN) network (page 3).

It would have been obvious to one ordinary skilled in the art at the time the invention was made given the suggestions of Buse for configuring over a network a device coupled thereto with an IP address using an address resolution protocol, to include the use of a probe and assign the IP address to the device's network interface which connects the device to the network. Each device connected to the network is uniquely identified by its connection to network, this single connection is represented by the IP address which provides access for all other devices systems connected to the network, thereby, it is obvious to one ordinary skilled in the art, that the network adapter (network interface or NIC) is assigned this IP address as exemplified in the Cheshire reference.

Regarding claim 9, said device is a printer (Cheshire: page 5).

Regarding claim 10, said network adapter is a ("low-cost") network interface (adapter)(Cheshire: page 3).

Regarding claim 17, this claim comprised a network based ("imaging") system, including limitations on claim 1 when combined including the instructions executable on a computer to perform the method steps disclosed on the method claim 1, same rationale of rejection is applicable.

Regarding claim 25, this apparatus (system) claim is substantially the same as the method claim 10, same rationale of rejection is applicable.

5. Claims 2-6 and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buse in view of Cheshire in further view of Reed et. al. (Reed) U.S. Patent No. 6,061,739.

Regarding claim 2-5, iterating i.e. repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (Cheshire page 3), however Cheshire does not explicitly teach wherein the predetermined number is 30;

Reed teaches a first host computer incorporating a generating an internet protocol address in a address resolution protocol probe broadcast request (col 2/lines 20-30);

sending said address resolution on an Ethernet LAN network for determining if an internet protocol address is in use (col 2/lines 20-30);

wherein the number of requests is a preset threshold (col 4/lines 19-20) and first specified time interval to wait for a response are programmable values (col 5/lines 28-33).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to include means for repeating said generating step, said incorporating step, said sending step and said determining step for at least a predetermined number of times (e.g. 30), motivation would be to program the number of request issues and the time to wait for a response based on network environment factors such as network latency and its dependency on network traffic, distance and the characteristic of the communication links.

Regarding claim 6, if said number of times said generating step is performed exceeds said predetermined number then said computer fails to automatically assign said network adapter an internet protocol address (Cheshire: page 3).

Regarding claims 18-22, these apparatus (system) claims are substantially the same as the method claims 2-6 respectively, same rationale of rejection is applicable.

6. Claims 7, 11-16 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buse in view of Cheshire in further view of Mellquist U.S. Patent No. 6,115,545.

Regarding claim 7, although prior art discloses sending an ARP probe message (i.e. "broadcasting discovery packet") on said network; and determining if said network adapter has a "valid" internet protocol address, it does not explicitly teach determining if internet protocol address is valid

Mellquist teaches that in order to configure a device with an internet protocol address it is required that a free address in the range of valid unique addresses must be selected and that a sub-net mask having a mask that must be the same on all entities across the sub-net is required (col 3/lines 11-19);

It would have been obvious to one ordinary skilled in the art at the time the invention was made to ensure that a unique valid internet address is used to configure a network device, as taught by the reference, where such validation includes verifying that an internet protocol address having the same mask as all entities on the subnet, motivation would be verify that applied address meet all requirements that ensure proper operation, to avoid major problems as suggested by Mellquist.

Regarding claim 11, this claim is substantially the same as claims 1 and 7 as discussed above, same rationale of rejection is applicable.

Regarding claim 12, wherein if said internet protocol address is in use, then further comprising the step of repeating said generating step, said incorporating step, said sending step and said determining step (Cheshire, page 3).

Regarding claims 13-16, these claims are substantially the same as claims 3-6 respectively, same rationale of rejection is applicable.

Regarding claim 23, this apparatus (system) claim is substantially the same as claim 7, same rationale of rejection is applicable.

7. Claims 8 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buse-Cheshire in view of Mellquist in further view of Request for Comments (2563), Troll, May 1999

Regarding claim 8, however the above-mentioned prior art of record does not explicitly teach determining whether said network allows said computer to assign an internet protocol address to network devices, prior to generating step,

Troll teaches client nodes configured to be able to determine whether or not the network is being centrally administrated, allowing it determine whether or not it should assign itself a IP (link-local)

address (page 2), including an Auto-configure option which allows a computer node to determine whether or not it should generate an IP address (page 3) (i.e. prior to performing the generating step).

It would have been obvious to one ordinary skilled in the art at the time the invention was made to utilize the Troll teachings to implement determining whether said network allows said computer to assign an internet protocol address to said network adapter, motivation would be to enable the flexibility of an Auto-configure Option along with the IP address assignment that notifies the client that the network does not have an IP address to offer upon determining the absence of an DHCP server.

Regarding claims 24, this apparatus (system) claim is substantially the same as claim 8, same rationale of rejection is applicable.

**Citation of Pertinent Art:**

8. The following prior art made of record and not relied upon are considered pertinent to applicant's disclosure. Copies of Non-patent Literature documents cited will be provided as set forth in MPEP§ 707.05(a):

(US 5,822,531) 10-1998

Gorczytz et. al: Teach where devices communicate with other devices via a network (e.g. LANs 14 and 16), the device connects to the network via a network adapter, which provides the primary connection between a server node and the network, the network adapter is assigned an IP address (col 2/lines 60-col 3/line 42).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prieto, B. whose telephone number is (571) 272-3902. The Examiner can normally be reached on Monday-Friday from 6:00 to 3:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the Examiner's Supervisor, Jack B. Harvey can be reached on (571) 272-3896. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3800/4700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system, status information for published application may be obtained from either Private or Public PAIR, for unpublished application Private PAIR only (see <http://pair-direct.uspto.gov> or the Electronic Business Center at 866-217-9197 (toll-free).

Any response to this action should be mailed to:  
Commissioner of Patents and Trademarks  
Washington, D.C. 20231

or faxed to the Central Fax Office:

(703) 872-9306, for Official communications and entry;

Or Telephone:

(703)-306-5631 for TC 2100 Customer Service Office.

  
B. Prieto

TC 2100

Patent Examiner

November 18, 2004